

**IT IS THE VENDOR'S RESPONSIBILITY TO  
CHECK FOR ADDENDA PRIOR TO SUBMITTING PROPOSALS**

**NOTICE TO BIDDERS  
SPECIFICATION NO. 04-165**

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

**Two (2) Bi-Directional Amps for Area Hospitals**

Sealed bids will be received by the City of Lincoln, Nebraska on or before 12:00 noon **Wednesday, July 21, 2004** in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above.

SPECIFICATION 04-165  
TWO (2) BIDIRECTIONAL AMPS FOR AREA HOSPITALS  
OPEN 12:00 NOON, JULY 21, 2004

1. SCOPE

- 1.1 The City of Lincoln is requesting bids for bi-directional amplifiers (BDA) to enhance the indoor radio coverage for the 800 Mhz Trunked Radio system in two (2) of the hospitals in Lincoln, Nebraska.
- 1.2 The primary purpose of the BDAs will be to enhance the coverage of the City's radio system in the hospital emergency rooms for Public Safety Personnel.
- 1.3 The base station transmit frequencies are between 856 and 861 Mhz and the receive frequencies are between 811 and 816 Mhz.

	Lower Frequency (Mhz)	Upper Frequency (Mhz)
Downlink	856.2125	860.9625
Uplink	811.2125	815.9625

2. GENERAL

- 2.1 The primary purpose of the Bidirectional Amplifier Systems is to provide portable coverage in the hospital's Emergency Rooms.
- 2.2 A Secondary Coverage Area is identified in each hospital.
  - 2.2.1 This area of the hospital will be used to expand the Emergency Room for noncritical patients care in the case of a mass casualty situation.
- 2.3 The City of Lincoln's trunked radio system is an EDACS, 2 site, 20-channel, simulcast trunked radio system with the repeater transmitters operating between 856.2125 Mhz and 860.9625 Mhz and the receivers operating between 811.2125 and 815.9625 Mhz.
- 2.4 Site 1 of the Radio System is located at 40-49-53N, 96-42-13.0W (1901 N 14<sup>th</sup>)
  - 2.4.1 Site 1 ERP = 52.02 dbm/Channel
  - 2.4.2 Site 1 antennas are mounted 350 feet above ground level.
  - 2.4.3 The receive antenna system uses a 20 db gain tower top amplifier and a 12 db gain antenna.
- 2.5 Site 2 of the Radio System is located at 40-43-12.0 N, 96-35-52.0W (9001 Yankee Hill Road).
  - 2.5.1 Site 2 ERP = 51.11 dbm/Channel.
  - 2.5.2 Site 2 antennas are mounted 480 feet above ground level.
  - 2.5.3 The receive antenna system uses a 20 db gain tower top amplifier and a 12 db gain antenna.
- 2.6 The Transmit power of the typical portable radio is 2.5 watts maximum.
- 2.7 The outside donor antennas used by the BDAs will be aimed towards Site
  - 2.7.1 Antennas used inside the hospitals shall be a low profile design that can be mounting in ceiling tile.
  - 2.7.2 Cabling throughout the hospitals should typically be designed to follow existing corridors.
  - 2.7.3 The design of the system should be such that it will allow for expansion of the coverage into other areas of the hospitals in the future.

3. REQUIRED INFORMATION

- 3.1 Bidders shall include the following information with their response:
  - 3.1.1 An itemized list of equipment and supplies needed at each hospital.
  - 3.1.2 A new layer added to the dwg files supplied showing the location of the indoor antennas and the coverage area provided by the design on a CD Rom.
  - 3.1.3 A delivery date indicating how soon the proposed equipment can be shipped.

4. SITES

- 4.1 Bryan/LGH West
  - 4.1.1 Bryan/LGH West is located at 2300 South 16<sup>th</sup> Street
  - 4.1.2 The coordinates are 40-47-23N, 96-41-58W.
  - 4.1.3 The donor antenna will be mounted on the roof of the penthouse.
  - 4.1.4 The penthouse is located above the 4<sup>th</sup> floor of this new addition of the hospital.
  - 4.1.5 There is a clear line of site to site 1.
  - 4.1.6 Cabling from the donor antenna to the BDA will be run down a pipe chase in the phone closet located next to the elevators in the north section of the new addition to the basement of the building.
  - 4.1.7 From there it will follow existing cable trays until it come back up into the data closet where the BDA Amplifier is located.
  - 4.1.8 The layer of the drawings identifying the coverage areas is labeled "BDA Coverage".
  - 4.1.9 The primary coverage area for emergency care is located on the first floor of the hospital.
  - 4.1.10 The secondary coverage Area for emergency care is also located on the first floor of the hospital, adjacent to the primary coverage area.
- 4.2 Bryan/LGH East Hospital
  - 4.2.1 Bryan/LGH East Hospital is located at 1600 South 48<sup>th</sup> Street
  - 4.2.2 The coordinates are 40-47-45N, 96-39-08W.
  - 4.2.3 The donor antenna will be mounted on the roof of the 8<sup>th</sup> floor.
  - 4.2.4 There is a clear line of site to site 1.
  - 4.2.5 The antenna coax will be run into the electronics room, over to an open shaft and down to the second floor.
  - 4.2.6 A suitable location for mounting the BDA will be found in either an equipment closet or above the ceiling.
  - 4.2.7 The layer of the drawings identifying the coverage areas is labeled "BDA Coverage".
  - 4.2.8 The Primary Coverage Area for the emergency care is located on the second floor of the hospital.

- 4.2.9 The Secondary coverage Area for emergency care is located on the first floor of the hospital almost directly below the primary coverage area.
- 4.2.10 Interested bidders can contact the City's Purchasing Department to request a CD containing AutoCAD dwg files of each the hospital floor plans for designing the BDA Systems.

5. DELIVERY

- 5.1 Delivery time will be used in the evaluation of the bids.

**PROPOSAL**  
**SPECIFICATION NO. 04-165**  
**BID OPENING TIME: 12:00 NOON**  
**DATE: Wednesday, July 21, 2004**

The undersigned, having full knowledge of the requirements of the City of Lincoln for the below listed phases and the contract documents (which include Notice, Instructions, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to enter into a contract with the City the below listed fees for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for fees listed below.

**ADDENDA RECEIPT:** The receipt of addenda to the specification numbers \_\_\_\_ through \_\_\_\_ are hereby acknowledged. Failure of any submitter to receive any addendum or interpretation of the specifications shall not relieve the submitter from any obligations specified in the request. All addenda shall become part of the final contract document.

Item	Description	Unit	Unit cost	Total Cost
1.	Bi-Directional Amp System for Primary Coverage Area of Bryan LGH East  Make _____ Model _____	1 each	Lump Sum	\$ _____
2.	Bi-Directional Amp System for Primary Coverage Area of Bryan LGH West  Make _____ Model _____	1 each	Lump Sum	\$ _____
3.	Option for Secondary Coverage Area of Bryan LGH East  Make _____ Model _____	1 each	Lump Sum	\$ _____
4.	Option for Secondary Coverage Area of Bryan LGH West  Make _____ Model _____	1 each	Lump Sum	\$ _____
5.	Delivery Date _____			

**NO BID SECURITY REQUIRED**

**AFFIRMATIVE ACTION PROGRAM:** Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

**RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.  
MARK OUTSIDE OF BID ENVELOPE: SEALED BID FOR SPEC. 04-165**

\_\_\_\_\_  
**COMPANY NAME**

\_\_\_\_\_  
**BY (Signature)**

\_\_\_\_\_  
**STREET ADDRESS or P.O. BOX**

\_\_\_\_\_  
**(Print Name)**

\_\_\_\_\_  
**CITY, STATE          ZIP CODE**

\_\_\_\_\_  
**(Title)**

\_\_\_\_\_  
**TELEPHONE No.          FAX No.**

\_\_\_\_\_  
**(Date)**

\_\_\_\_\_  
**EMPLOYER'S FEDERAL I.D. NO.  
OR SOCIAL SECURITY NUMBER**

\_\_\_\_\_  
**ESTIMATED DELIVERY DAYS**

\_\_\_\_\_  
**E-MAIL ADDRESS**

\_\_\_\_\_  
**TERMS OF PAYMENT**

Bids may be inspected in the Purchasing Division offices during normal business hours, after tabulation by the purchasing agent. If you desire a copy of the bid tabulation to be mailed to you, you must enclose a self-addressed stamped envelope with your bidding documents. Bid tabulations can also be viewed on our website at: [lincoln.ne.gov](http://lincoln.ne.gov) Keyword: Bid